In the Claims

Listing of All Claims Including Current Amendments

- 1. (Cancelled)
- 2. (Cancelled)
- 3. (Cancelled)
- 4. (Currently Amended) A device according to claim 3 for service braking a vehicle by means of a service brake actuator having a rotative motor, as its service brake applying means;

wherein energy from a loaded spring in a spring brake actuator connected to the service brake actuator is released at will for supplying supplementary service brake energy to the service brake actuator;

wherein the device comprises the spring brake actuator connected to the service brake actuator and containing a powerful spring, and control means for controlled release of energy from the spring when loaded, supplementary to the service brake energy supply from the service brake actuator;

wherein the spring in the spring brake actuator is a clock spring or spiral spring; wherein the spring brake actuator comprises:

the clock spring, attached at its outer end to a spring brake actuator housing and mechanically charged at a rotation of the an actuator shaft in a brake release direction;

an electric coil for keeping - when electrically energized - the clock spring in its charged condition; and

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transfer means for transferring the rotative energy of the clock spring to the actuator shaft in a brake applying direction, when the coil is deenergized, but allowing free rotation of the shaft in either direction, when the coil is energized.

5. (Previously Presented) A method for service braking a vehicle comprising:

providing a service brake actuator having a rotative motor as its service brake applying means, and a spring brake actuator connected to the service brake actuator and having a chargeable spring disposed in the spring brake actuator;

charging the spring in one rotational direction during a normal brake or release operation; and

releasing the charged spring in another rotational direction for supplying supplementary service brake energy to the service brake actuator to apply a brake operation requiring an energy in excess of the normal brake operation or in an emergency situation.

- 6. (Cancelled)
- 7. (Previously Presented) A brake device for a vehicle comprising:

a service brake actuator including a motor and a drive shaft connected to the motor and rotatable to apply a service brake operation;

a spring brake actuator connected to the service brake actuator and containing a spring, the spring having a charged position storing energy therein and a released position for releasing the stored energy; and

control means for controlled release of the stored energy from the spring in its charged position and applying a supplemental rotational energy to the drive shaft of the service brake actuator.

8. (Previously Presented) A brake device according to claim 7, wherein the spring in the spring brake actuator is a clock spring or spiral spring.

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- 9. (Previously Presented) A brake device according to claim 8, wherein the clock spring of the spring brake actuator has an outer end attached to a spring brake actuator housing and mechanically charged at a rotation of an actuator shaft in a brake release direction.
- 10. (Previously Presented) A brake device according to claim 9, further comprising an electric coil for keeping when electrically energized the clock spring in its charged position, and transfer means for transferring the rotational energy of the clock spring to the actuator shaft in a brake applying direction, when the coil is de-energized, but allowing free rotation of the shaft in either direction, when the coil is energized.
- 11. (Previously Presented) A brake device according to claim 10, wherein the transfer means comprises a cylindrical hub disposed between the actuator shaft and the clock spring.
- 12. (Previously Presented) A brake device according to claim 11, wherein the transfer means further comprises a locking spring coupled with the actuator shaft and the cylindrical hub.